into lobules ; this is the case with the Whales, the Bears, the Oxen, and a few other forms. A curious fact about the kidneys of the Mammalia is their very general asymmetry of position. One of them usually lies in a more advanced position than the other. The ureters lead from the kidneys to the urinary bladder, which in its form and relations is quite distinctive of the Mammalia. The bladder is formed out of the remains of the allantois, and is therefore not the exact homologue of the bladder of the frog, which is the equivalent of the entire sac which grows out of the cloaca in the mammal, and is the foetal allantois. The ureters open into the bladder in the higher Mammalia., but lower down in the urino-genital passage in the more primitive mammals.

The Body Cavity.—The Mammalia differ from all other living vertebrates by the arrangement of the body cavity in which lie the viscera. That cavity is divided into two by a partly muscular and partly tendinous partition, the diaphragm. -No other verte-brate has this precise disposition of the coelom. The diaphragm lies usually transversely to the longitudinal axis of the body, but gets a much more oblique arrangement in the Cetacea and the Sirenia, whose needs demand a more expanded chamber for the lungs. For in front of the diaphragm lie the lungs and heart; behind it the stomach, liver, intestines, and the organs of reproduction and excretion. The diaphragm is used in re-spiration ; when its muscles contract, the surface jiirected toward the pleural cavity becomes less convex, and the cavity of the lungs is thus increased, allowing them to expand under the pressure of the entering air.

The Lungs.—The lungs of the Mammalia differ from those of animals lying lower in the series by the fact, just referred to, that they occupy a pleural cavity completely shut off from the abdomen by the diaphragm. As a rule the lungs of the Mammalia are to be distinguished by their more or less extensive lobation. In the Whales, however, and in the Sirenia, they are not much divided, but present the appearance of the simple

sac-like lungs of the reptiles. In some mammals there is a median and posterior unpaired lobe of the lung, which lies in the post-pericardial cavity behind the pericardium. This is not universally present. The lungs are very frequently not symmetrical in their lobation, the number of separate lobes on the right side